

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number  
WO 2005/080050 A1

(51) International Patent Classification<sup>7</sup>: B25B 27/18,  
23/08, B23P 19/04, 19/05

Michael [AU/AU], 62 Camira Way, Quinns Rock, Western  
Australia 6030 (AU). GEORGE, Ian, Colin [AU/AU]; 7  
Hilek Court, Merriwa, Western Australia 6030 (AU).

(21) International Application Number:  
PCT/AU2005/000223

(74) Agent: WRAY & ASSOCIATES; Level 4, The Quadrant,  
1 William Street, Perth, Western Australia 6000 (AU).

(22) International Filing Date: 18 February 2005 (18.02.2005)

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
2004900823 19 February 2004 (19.02.2004) AU

(71) Applicant (for all designated States except US):  
WELD-NUT PTY LTD [AU/AU]; Unit 13, 15 Bon-  
ner Drive, Malaga, Western Australia 6090 (AU).

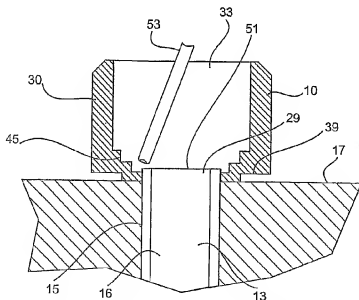
(72) Inventors; and

(75) Inventors/Applicants (for US only): PETRIE, Lau-  
rence, Ross [AU/AU]; Lot 101, Bernborough Way,  
Byford, Western Australia 6021 (AU). JACKSON, Karl,

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,

[Continued on next page]

(54) Title: EXTRACTION DEVICE



(57) Abstract: An extraction device (10) for facilitating removal of a sheared fastening element (13) in threaded engagement with a member (17). The extraction device (10) comprises of a hollow body (30) defining a cavity (33) for receiving an exposed portion of the sheared fastening element (13). The body (30) has a first face (31) onto which the cavity (33) opens to define an opening (35) through which the exposed portion (29) of the sheared fastening element (13) can be received. The cavity (33) has a boundary wall (35) with an inwardly stepped configuration (45) in the direction towards the opening (35). The stepped configuration (45) presents at least one edge (49) which facilitates wedging of the body (30) to the exposed portion (29) of the sheared fastening element (13) received within the cavity.

WO 2005/080050 A1

WO 2005/080050 A1



SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

Published:

— with international search report